

**P a t e n t   c l a i m s**

1.    A method in a data communication network for virtual continuous connection between a first system to other systems in said data communication network, said first  
5    system divided into layers according to the Open System Interconnection (OSI), OSI layer 2 (L2) using a PPP protocol, OSI layer 3 and 4 (L3 and L4) using a TCP/IP protocol, said connection provided by a telephone network connected to said first system by a modem or similar means  
10    compatible with said telephone network,  
characterized in:

•    establishing said virtual continuous connection on L3 with a second system by means of a control logic integrated with said PPP protocol in L2 by establishing a temporary  
15    connection with said second system on L2,

•    closing said temporary connection when a timer in said control logic elapses, still maintaining said continuous connection,

•    re-establishing said temporary connection when a new  
20    message within said continuous connection is sent from L3 to L2,

•    executing incoming messages by means of said control logic and sending them to L3.

T O U R N E M E N T

2. A method as defined in claim 1,  
characterized in that said establishment and  
reestablishment of said temporary connection comprising  
dial up to said second system by means of said modem or  
5 similar means through said telephone network.

3. A method as defined in any of the preceding claims,  
characterized in the step of resetting said timer each time  
a message is received from L3 to L2.

4. A method as defined in any of the preceding claims,  
10 characterized in that said control logic is installed in a  
driver in L2 connected to said modem or similar means.

5. A method as defined in any of the preceding claims,  
characterized in that said telephone network is a PSTN or  
an ISDN network.

15 6. An arrangement in a data communication network for  
virtual continuous connection between a first system to  
other systems in said data communication network, said  
first system divided into layers according to the Open  
System Interconnection (OSI), OSI layer 2 (L1) using a PPP  
20 protocol, OSI layer 3 and 4 (L3 and L4) using a TCP/IP  
protocol, said connection provided by a telephone network  
connected to said first system by a modem or similar means  
compatible with said telephone network,  
characterized in a control logic integrated with said PPP  
25 protocol in L2 for establishing said virtual continuous  
connection with said second system on L2 by means of a

temporary connection, said control logic closing said temporary connection when a timer in said control logic elapses, still maintaining said virtual continuous connection, said control logic re-establishing said temporary connection when a new message within said continuous connection is sent from L3 to L2, said control logic executing incoming messages and transferring them to L3.

7. An arrangement as defined in claim 6, characterized in that said establishment and reestablishment of said temporary connection comprising dial up to said second system by means of said modem or similar means through said telephone network.

8. An arrangement as defined in claims 6 or 7, characterized in that the timer is adapted to be reset each time a message is received from L3 in L2.

9. An arrangement as defined in claims 6-8, characterized in that said control logic is installed in a driver in L2 connected to said modem or similar means.

10. A arrangement as defined in claims 6-9, characterized in that said telephone network is a PSTN or an ISDN network.